



NOAA FISHERIES

Office of Aquaculture

Growth of American marine aquaculture is an opportunity to support local seafood production, strengthen coastal community resilience, and ensure a safe, secure, and sustainable supply of seafood.

West Coast Region Aquaculture



Photo credit: Bill Dewey

Oregon and Washington

AQUACULTURE IN THE REGION

The West Coast Region works closely with regional tribes, the states of Washington and Oregon, the aquaculture industry, and non-governmental organizations to expand opportunities to grow marine products locally, such as finfish, shellfish, and seaweed.

Aquaculture in the Northwest includes multiple species of oysters, mussels, and clams, as well as Pacific salmon. Salmon have been grown commercially in the state for nearly 40 years. The Northwest also works with partners to responsibly restore and enhance populations of native Olympia oysters, pinto abalone, bull kelp and Pacific salmon.

Washington State is the nation's leading producer of farmed bivalve shellfish. Related research at the Northwest Fisheries Science Center focuses on the effects of ocean acidification on shellfish, shellfish safety (harmful algal blooms and pathogens), native Olympia oyster restoration, and the habitat value of shellfish beds. Finfish aquaculture-related research includes sablefish culture and alternative feeds.

ECONOMIC BENEFITS OF AQUACULTURE

U.S. marine aquaculture is an important industry. In many fishing and coastal communities, it creates year-round jobs that support resilient working waterfronts and economic development. For example, in 2013 farmed bivalves contributed nearly \$150 million to Washington’s economy.

Nationwide, aquaculture production is valued at \$1.5 billion. The aquaculture industry also supports other sectors such as seafood processing, feed and equipment manufacturing, and food services.

SHELLFISH INITIATIVE

NOAA Fisheries is working to increase populations of bivalve shellfish in coastal waters—including oysters, clams, and mussels—through commercial production and conservation activities. NOAA recognizes the broad suite of economic, social, and environmental benefits provided by increasing shellfish populations, including:

- Meeting a growing seafood demand
- Cleaner water and nutrient removal
- Shoreline protection
- Native shellfish restoration

To maximize these ecological and economic benefits, NOAA has increased collaboration with public and private partners to seek opportunities to streamline and enhance marine planning and permitting, environmental research, restoration and

farming techniques, and innovative financing. Both Washington and Oregon have launched their own state shellfish initiatives inspired by the national effort. As part of the Washington Shellfish Initiative, NOAA and collaborators opened the Kenneth K. Chew Center for Shellfish Research and Restoration, which supports restoration of Olympia oysters and pinto abalone.

AQUACULTURE BY THE NUMBERS

- Oceans cover over 70% of the Earth’s surface, but account for only 2% of food production. With limited arable land and fresh water, the world is turning to the oceans for additional food as the global population is projected to increase to 9 billion by the year 2050.
- The U.S. aquaculture industry produced \$1.5 billion worth of seafood in 2018, with 39% of that value coming from the Pacific region.
- The U.S. aquaculture industry is currently focused on production of high-value food species. Thus, while the value of U.S. aquaculture production equals about 21% of the value of total U.S. seafood production, the volume equals about 7% of the total production.
- Globally, aquaculture supplies more than 50% of all seafood produced for human consumption—this percentage continues to rise.



For more information about aquaculture in the Northwest, contact Regional Aquaculture Coordinator Dan Tonnes (dan.tonnes@noaa.gov).

